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(71) Anmelder (für alle Bestimmungsstaaten ausser US): **IMPELLA CARDIOTECHNIK AG [DE/DE]; Pauwelsstrasse 19, D-52074 Aachen (DE).**

(72) Erfinder; und
(75) Erfinder/Anmelder (nur für US): **SIESS, Thorsten [DE/DE]; Kirchenstrasse 8, D-52146 Würselen (DE).**

(74) Anwälte: **SELTING, Günther usw.; Deichmannhaus am Dom, Bahnhofsvorplatz 1, Postfach 10 22 41, D-50462 Köln (DE).**

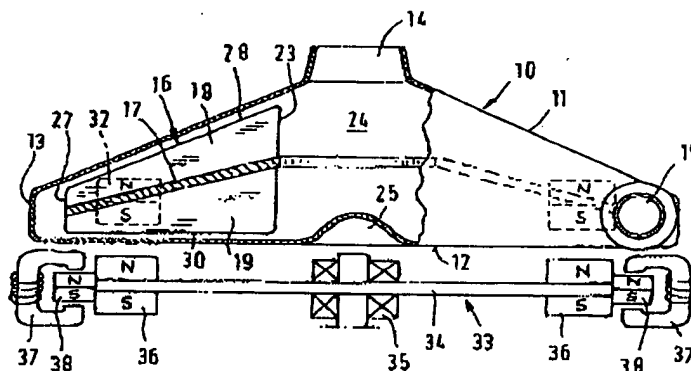
(81) Bestimmungsstaaten: **AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO Patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), curasisches Patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), europäisches Patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI Patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).**

Veröffentlicht

*Mit internationalem Recherchenbericht.
Vor Ablauf der für Änderungen der Ansprüche zugelassenen Frist; Veröffentlichung wird wiederholt falls Änderungen eintreffen.*

(54) Title: **BLOOD PUMP WITHOUT BRARING**

(54) Bezeichnung: **LAGERLOSE BLUTPUMPE**



(57) Abstract

Disclosed is a blood pump having a pump housing (10) in which an impeller (16) is arranged without housing. An external magnetic drive device (33) turns the impeller (16) via a magnetic coupling (32, 36). The lower side (30) of the wings (19) of the impeller is configured as a support surface (30) which slopes at the following end. A hydrodynamic supporting effect is thus obtained during rotation. Said effect raises the impeller (17) from the bottom surface of the pump housing (10). As the pump housing does not comprise bearings and seals, the thrombosis risk and the danger of penetration of foreign bodies into the blood by attrition is reduced.

WALLINGTON-DUMMER

PATENT & TRADE MARK ATTORNEYS

12 CLARKE STREET
RYDALMERE NSW 2116
AUSTRALIA
TELEPHONE: (02) 9684-6917
INTERNATIONAL: +61-2-9684-6917
FACSIMILE: +61-2-9638-4793

MAIL TO
PO BOX 297
RYDALMERE NSW 1701
AUSTRALIA

SYDNEY OFFICE
SUITE 3, LEVEL 8
BARRACK HOUSE
16-20 BARRACK ST
SYDNEY NSW 2000

Peter C. Dummer BE FIPTA

21 September 2000

Knobbe, Martens, Olson & Bear
3801 University Avenue
Suite 710
Riverside
California 92501-3229
United States of America

Facsimile No. 0011-1-909-781-4507

Attention: Michael H. Trenholm

Dear Michael

Re: Application No. 09/281,608 filed 30 March 1999
Entitled: A Rotary Pump with Hydrodynamically Suspended Impeller
Your Ref. DUMMER4.001APC
Our Ref. 982011

We refer to our recent discussions in relation to the above case, recently allowed.

We are currently obtaining and will forward to you as soon as we receive it a Certified copy of the original priority document for this case, which we understand is required.

In relation to the formal drawings we attach with the e-mail copy of this letter in PDF format copies of the formal drawings. Could you please advise whether these drawings will overcome the formalities objections before the US PTO.

In relation to the Information Disclosure Statement we understand you are yet to confirm with the Examiner whether the additional Information Disclosure Statement will be incorporated and acknowledged in the present case.

One further issue has now arisen in relation to information disclosure and that concerns recently discovered International Patent Application PCT/EP99/08835 to

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Impella Cardiotechnik AG. We attach a copy of its Abstract page from which you will see that it has an earliest priority date later than that of our client's application. We assume, because of this, that there is no need to formally disclose the existence of this specification to the US Patent Office, but we would be grateful for your confirmation that our understanding is correct.

We look forward to hearing from you.

Yours sincerely
WALLINGTON-DUMMER

A handwritten signature in black ink, appearing to read 'Peter C. Dummer', with a long, sweeping horizontal stroke extending to the right.

Peter C. Dummer